~~1/23~~ 1/29

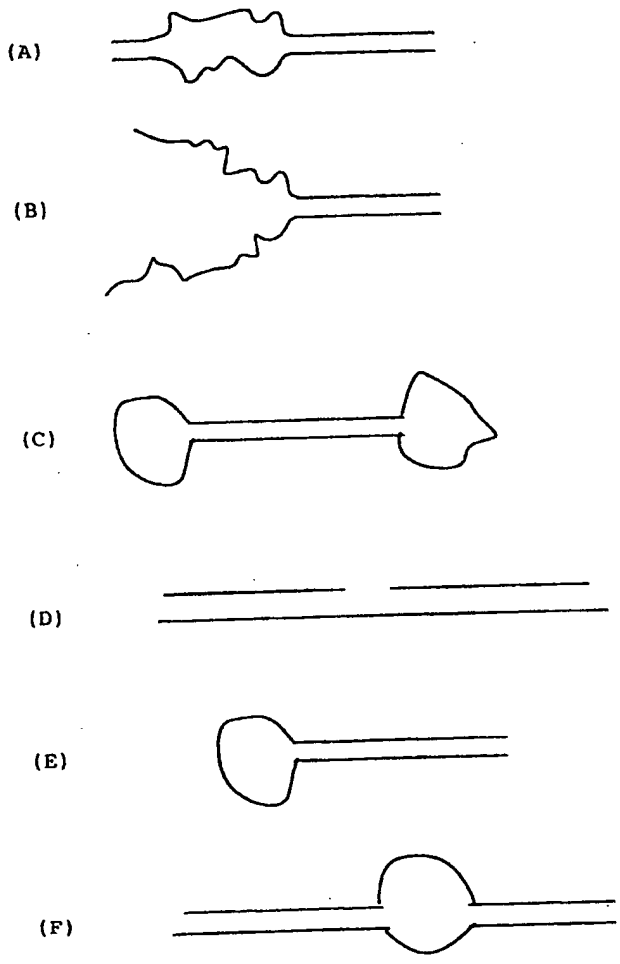


Figure 1 (A-F)

Construct Forms Comprising at Least one Single-Stranded Region

~~2/23~~ 2/29

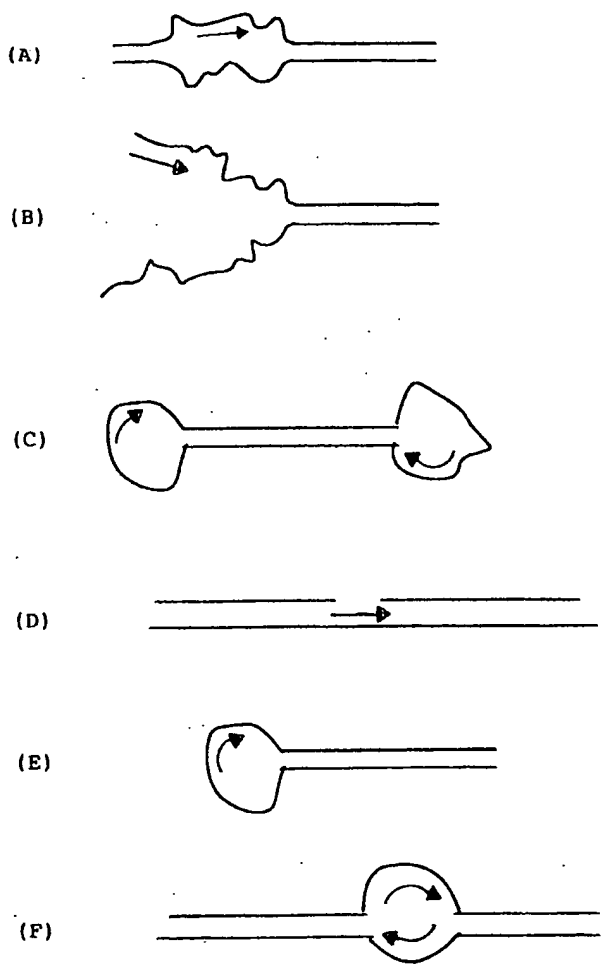


Figure 2 (A-F)

Functional Forms of the Construct

~~3/23~~ 3/29

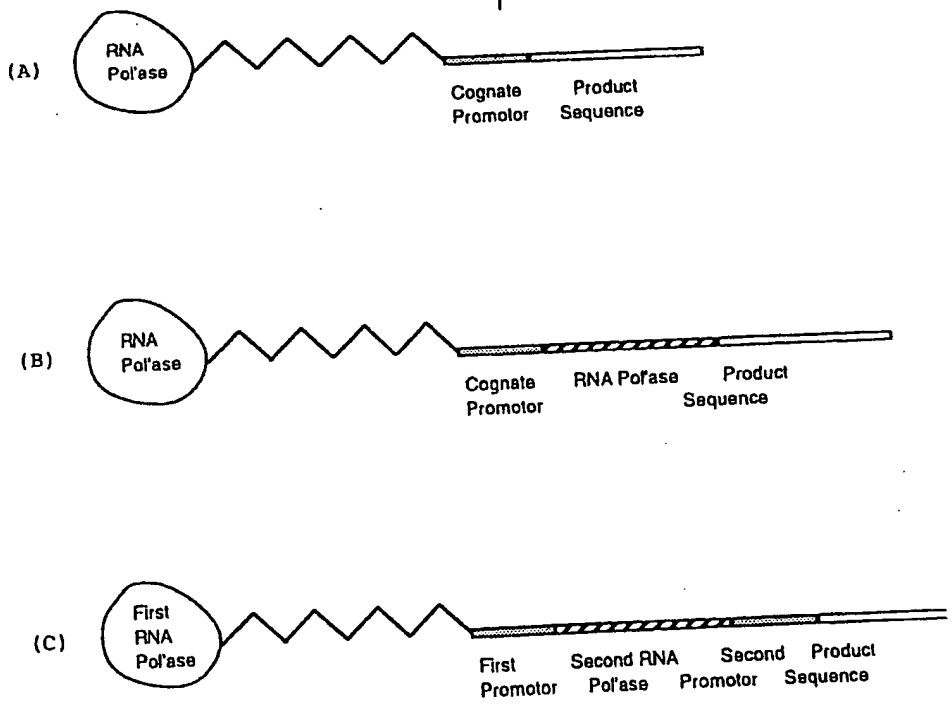


Figure 3 (A-C)

Three Constructs with an RNA Polymerase Covalently Attached to a Transcribing Cassette

~~4/23~~ 4/29

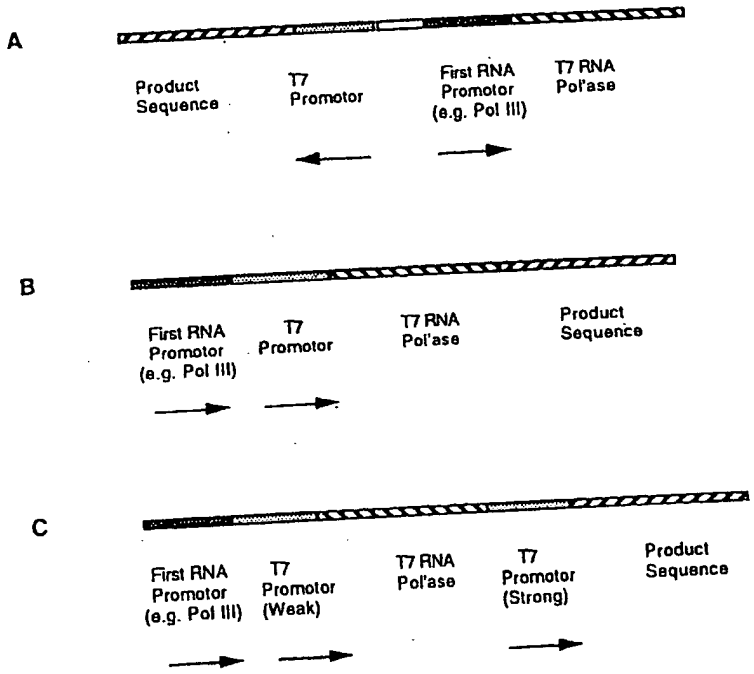


Figure 4 (A-C)

Three Constructs with Promoters for Endogenous RNA Polymerase

M13mp18. Seq Length: 7250

1. AATGCTACTA CTATTAGTAG AATTGATGCC ACCTTTTCAG CTCGCGCCCC
51. AAATGAAAAT ATAGCTAAAC AGGTTATTGA CCATTTGCGA AATGTATCTA
101. ATGGTCAAAC TAAATCTACT CGTTCGCAGA ATTGGGAATC AACTGTTACA
151. TGGAATGAAA CTTCCAGACA CCGTACTTTA GTTGCATATT TAAAACATGT
201 TGAGCTACAG CACCAGATTC AGCAATTAAG CTCTAAGCCA TCCGCAAAAA
251 TGACCTCTTA TCAAAAGGAG CAATTAAAGG TACTCTCTAA TCCTGACCTG
301. TTGGAGTTTG CTTCCGGTCT GGTTCGCTTT GAAGCTCGAA TTAAAACGCG
351. ATATTTGAAG TCTTTCGGGC TTCCTCTTAA TCTTTTTGAT GCAATCCGCT
401. TTGCTTCTGA CTATAATAGT CAGGGTAAAG ACCTGATTTT TGATTTATGG
451. TCATTCTCGT TTTCTGAACT GTTTAAAGCA TTTGAGGGGG ATTCAATGAA
501. TATTTATGAC GATTCCGCAG TATTGGACGC TATCCAGTCT AAACATTTTA
551. CTATTACCCC CTCTGGCAAA ACTTCTTTTG CAAAAGCCTC TCGCTATTTT
601. GGTTTTTATC GTCGTCTGGT AAACGAGGGT TATGATAGTG TTGCTCTTAC
651. TATGCCTCGT AATTCCTTTT GGCGTTATGT ATCTGCATTA GTTGAATGTG
701. GTATTCCTAA ATCTCAACTG ATGAATCTTT CTACCTGTAA TAATGTTGTT
751. CCGTTAGTTC GTTTTATTAA CGTAGATTTT TCTTCCCAAC GTCCTGACTG
801. GTATAATGAG CCAGTTCTTA AAATCGCATA AGGTAATTCA CAATGATTAA
851. AGTTGAAATT AAACCATCTC AAGCCCAATT TACTACTCGT TCTGGTGTTC
901. TCGTCAGGGC AAGCTTATT CACTGAATGA GCAGCTTTGT TACGTTGATT
951. TGGGTAATGA ATATCCGGTT CTTGTCGAAG ATTACTCTTG ATGAAGGTCA
1001 GCCAGCCTAT GCGCCTGGTC TGTACACCGT TCATCTGTCC TCTTTCAAAG
1051 TTGGTCAGTT CGGTTCCCTT ATGATTGACC GTCTGCGCCT CGTTCCGGCT
1101 AAGTAACATG GAGCAGGTCG CGGATTTCGA CACAATTTAT CAGGCGATGA
1151 TACAAATCTC CGTTGTACCTT TGTTTCGCGC TTGGTATAAT CGCTGGGGGT
1201 CAAAGATGAG TGTTTTAGTG TATTCTTTCG CCTCTTTCGT TTTAGGTTGG

Figure 5

M13mp18 Nucleic Acid Sequence

~~6/23~~ 6/29

1251 TGCCTTCGTA GTGGCATTAC GTATTTTACC CGTTTAATGG AAACTTCCTC
1301 ATGAAAAAGT CTTTAGTCCT CAAAGCCTCT GTAGCCGTTG CTACCCTCGT
1351 TCCGATGCTG TCTTTCGCTG CTGAGGGTGA CGATCCCGCA AAAGCGGCCT
1401 TTAACTCCCT GCAAGCCTCA GCGACCGAAT ATATCGGTTA TGCGTGGGCG
1451 ATGGTTGTTG TCATTGTCGG CGCAACTATC GGTATCAAGC TGTTTAAGAA
1501 ATTCACCTCG AAAGCAAGCT GATAAACCGA TACAATTAAA GGCTCCTTTT
1551 GGAGCCTTTT TTTTTGGAGA TTTTCAACGT GAAAAAATTA TTATTCGCAA
1601 TTCCTTTAGT TGTTCCTTTC TATTCTCACT CCGCTGAAAC TGTTGAAAGT
1651 TGTTTAGCAA AACCCCATAC AGAAAATTCA TTTACTAACG TCTGGAAAGA
1701 CGACAAAACT TTAGATCGTT ACGCTAACTA TGAGGGTTGT CTGTGGAATG
1751 CTACAGGCGT TGTAGTTTGT ACTGGTGACG AAACTCAGTG TTACGGTACA
1801 TGGGTTCCTA TTGGGCTTGC TATCCCTGAA AATGAGGGTG GTGGCTCTGA
1851 GGGTGGCGGT TCTGAGGGTG GCGGTTCTGA GGGTGGCGGT ACTAAACCTC
1901 CTGAGTACGG TGATACACCT ATTCCGGGCT ATACTTATAT CAACCCTCTC
1951 GACGGCACTT ATCCGCCTGG TACTGAGCAA AACCCGCTA ATCCTAATCC
2001 TTCTCTTGAG GAGTCTCAGC CTCTTAATAC TTTCATGTTT CAGAATAATA
2051 GGTTCCGAAA TAGGCAGGGG GCATTAACTG TTTATACGGC CACTGTTACT
2101 CAAGGCACTG ACCCCGTTAA AACTTATTAC CAGTACACTC CTGTATCATC
2151 AAAAGCCATG TATGACGCTT ACTGGAACGG TAAATTCAGA GACTGCGCTT
2201 CAAGGCACTG ACCCCGTTAA AACTTATTAC CAGTACACTC CTGTATCATC
2151 AAAAGCCATG TGCCTCAACC TCCTGTCAAT GCTGGCGGCG GCTCTGGTGG
2201 TCCATTCTGG CTTTAATCAA GATCCATTCG TTTGTGAATA TCAAGGCCAA
2251 TCGTCTGACC TGCCTCAACC TCCTGTCAAT GCTGGCGGCG GCTCTGGTGG
2301 TGGTTCTGGT GGCGGCTCTG AGGGTGGTGG CTCTGAGGGT GGCGGTTCTG
2351 AGGGTGGCGG CTCTGAGGGA GGCGGTTCCG GTGGTGGCTC TGGTTCCGGT
2401 GATTTTGATT ATGAAAAGAT GGCAAACGCT AATAAGGGGG CTATGACCGA
2451 AAATGCCGAT GAAAACGCGC TACAGTCTGA CGCTAAAGGC AAACTTGATT

Figure 5

M13mp18 Nucleic Acid Sequence

2501 CTGTCGCTAC TGATTACGGT GCTGCTATCG ATGGTTTCAT TGGTGACGTT
2551 TCCGGCCTTG CTAATGGTAA TGGTGCTACT GGTGATTTTG CTGGCTCTAA
2601 TTCCCAAATG GCTCAAGTCG GTGACGGTGA TAATTCACCT TTAATGAATA
2651 ATTTCCGTCA ATATTTACCT TCCCTCCCTC AATCGGTTGA ATGTCGCCCT
2701 TTTGTCTTTA GCGCTGGTAA ACCATATGAA TTTTCTATTG ATTGTGACAA
2751 AATAAACTTA TTCCGTGGTG TCTTTGCGTT TCTTTTATAT GTTGCCACCT
2801 TTATGTATGT ATTTTCTACG TTTGCTAACA TACTGCGTAA TAAGGAGTCT
2851 TTATCATGCC AGTTCTTTTG GGTATTCCGT TATTATTGCG TTTCCTCGGT
2901 TTCCTTCTGG TAACTTTGTT CGGCTATCTG CTTACTTTTC TTAAAAAGGG
2951 CTTCGGTAAG ATAGCTATTG CTATTTCATT GTTTCTTGCT CTTATTATTG
3001 GGCTTAACTC AATTCTTGTG GGTTATCTCT CTGATATTAG CGCTCAATTA
3051 CCCTCTGACT TTGTTCAGGG TGTTCAGTTA ATTCTCCCGT CTAATGCGCT
3101 TCCCTGTTTT TATGTTATTC TCTCTGTAAA GGCTGCTATT TTCATTTTTG
3151 ACGTTAAACA AAAAATCGTT TCTTATTTGG ATTGGGATAA ATAATATGGC
3201 TGTTTATTTT GTAACTGGCA AATTAGGCTC TGGAAAGACG CTCGTTAGCG
3251 TTGGTAAGAT TCAGGATAAA ATTGTAGCTG GGTGCAAAAT AGCAACTAAT
3301 CTTGATTTAA GGCTTCAAAA CCTCCCGCAA GTCGGGAGGT TCGCTAAAAC
3351 GCCTCGCGTT CTTAGAATAC CGGATAAGCC TTCTATATCT GATTTGCTTG
3401 CTATTGGGCG CGGTAATGAT TCCTACGAATG AAAATAAAAA CGGCTTGCTT
3451 GTTCTCGATG AGTGCGGTAC TTGGTTTAAT ACCCGTTCTT GGAATGATAA
3501 GGAAAGACAG CCGATTATTG ATTGGTTTCT ACTGCTCGT AAATTAGGAT
3551 GGGATATTAT TTTTCTTGTT CAGGACTTAT CTATTGTTGA TAAACAGGCG
3601 CGTTCTGCAT TAGCTGAACA TGTTGTTTAT TGTCGTCGTC TGGACAGAAT
3651 TACTTTACCT TTTGTCGGTA CTTTATATTC TCTTATTACT GGCTCGAAAA
3701 TGCCTCTGCC TAAATTACAT GTTGGCGTTG TTAAATATGG CGATTCTCAA
3751 TTAAGCCCTA CTGTTGAGCG TTGGCTTTAT ACTGGTAAGA ATTTGTATAA
3801 CGCATATGAT ACTAAACAGG CTTTTTCTAG TAATTATGAT TCCGGTGTTT

Figure 5

M13mp18 Nucleic Acid Sequence

3851 ATTCTTATTT AACGCCTTAT TTATCACACG GTCGGTATTT CAAACCATTA
3901 AATTTAGGTC AGAAGATGAA ATTAACTAAA ATAATATTGA AAAAGTTTTC
3951 TCGCGTTCTT TGTCTTGCGA TTGGATTTGC ATCAGCATTT ACATATAGTT
4001 ATATAACCCA ACCTAAGCCG GAGGTTAAAA AGGTAGTCTC TCAGACCTAT
4051 GATTTTGATA AATTCACTAT TGACTCTTCT CAGCGTCTTA ATCTAAGCTA
4101 TCGCTATGTT TTCAAGGATT CTAAGGGAAA ATTAATTAAT AGCGACGATT
4151 TACAGAAGCA AGGTTATTCA CTCACATATA TTGATTTATG TACTGTTTCC
4201 ATTAAAAAAG GTAATTCAAA TGAAATTGTT AAATGTAATT AATTTTGTTT
4251 TCTTGATGTT TGTTTCATCA TCTTCTTTTG CTCAGGTAAT TGAAATGAAT
4301 AATTCGCCTC TGCGCGATTT TGTAACTTGG TATTCAAAGC AATCAGGCGA
4351 AATCCGTTATT GTTTCTCCCG ATGTAAAAGG TACTGTTACT GTATATTCAT
4401 CTGACGTTAA ACCTGAAAAT CTACGCAATT TCTTTATTTC TGTTTTACGT
4451 GCTAATAATT TTGATAATGGT TGGTTCAATT CCTTCCATAA TTCAGAAGTA
4501 TAATCCAAAC AATCAGGATT ATATTGATGA ATTGCCATCA TCTGATAATC
4551 AGGAATATGA TGATAATTCC GCTCCTTCTG GTGGTTTCTT TGTTCCGCAA
4601 AATGATAATG TTACTCAAAC TTTTAAAATT AATAACGTTC GGGCAAAGGA
4651 TTTAATACGA GTTGTCGAAT TGTTTGTAAA GTCTAATACT TCTAAATCCT
4701 CAAATGTATT ATCTATTGAC GGCTCTAATC TATTAGTTGT TAGTGCTCCT
4751 AAAGATATTT TAGATAACCT TCCTCAATTC CTTTCTACTG TTGATTTGCC
4801 AACTGACCAG ATATTGATTG AGGGTTTGAT ATTTGAGGTT CAGCAAGGTG
4851 ATGCTTTAGA TTTTTCATTT GCTGCTGGCT CTCAGCGTGG CACTGTTGCA
4901 GGCGGTGTTA ATACTGACCG CCTCACCTCT GTTTTATCTT CTGCTGGTGG
4951 TTCGTTCGGT ATTTTTAATG GCGATGTTTT AGGGCTATCA GTTCGCGCAT
5001 TAAAGACTAA TAGCCATTCA AAAATATTGT CTGTGCCACG TATTCTTACG
5051 CTTTCAGGTC AGAAGGGTTC TATCTCTGTT GGCCAGAATG TCCCTTTTAT
5101 TAAAGACTAA TAGCCATTCA AAAATATTGT CTGTGCCACG TATTCTTACG
5151 CGATTGAGCG TCAAAATGTA GGTATTTCCA TGAGCGTTTT TCCTGTTGCA

Figure 5

M13mp18 Nucleic Acid Sequence

5201	ATGGCTGGCG	GTAATATTGT	TCTGGATATT	ACCAGCAAGG	CCGATAGTTT
5251	GAGTTCTCT	ACTCAGGCAA	GTGATGTTAT	TACTAATCAA	AGAAGTATTG
5301	CTACAACGGT	TAATTTGCGT	GATGGACAGA	CTCTTTTACT	CGGTGGCCTC
5351	ACTGATTATA	AAAACACTTC	TCAAGATTCT	GGCGTACCGT	TCCTGTCTAA
5401	AATCCCTTTA	ATCGGCCTCC	TGTTTAGCTC	CCGCTCTGAT	TCCAACGAGG
5451	AAAGCACGTT	ATACGTGCTC	GTCAAAGCAA	CCATAGTACG	CGCCCTGTAG
5501	CGGCGCATTA	AGCGCGGCGG	GTGTGGTGGT	TACGCGCAGC	GTGACCGCTA
5551	CACTTGCCAG	CGCCCTAGCG	CCCGCTCCTT	TCGCTTTCTT	CCCTTCCTTT
5601	CTCGCCACGT	TCGCCGGCTT	TCCCCGTCAA	GCTCTAAATC	GGGGGCTCCC
5651	TTTAGGGTTC	CGATTTAGTG	CTTTACGGCA	CCTCGACCCC	AAAAAACTTG
5701	ATTTGGGTGA	TGGTTCACGT	AGTGGGCCAT	CGCCCTGATA	GACGGTTTTT
5751	CGCCCTTTGA	CGTTGGAGTC	CACGTTCTTT	AATAGTGGAC	TCTTGTTCCA
5801	AACTGGAACA	ACACTCAACC	CTATCTCGGG	CTATTCTTTT	GATTTATAAG
5851	GGATTTTGCC	GATTTCGGAA	CCACCATCAA	ACAGGATTTT	CGCCTGCTGG
5901	GGCAAACCAG	CGTGGACCGC	TTGCTGCAAC	TCTCTCAGGG	CCAGGCGGTG
5951	AAGGGCAATC	AGCTGTTGCC	CGTCTCGCTG	GTGAAAAGAA	AAACCACCCT
6001	GGCGCCCAAT	ACGCAAACCG	CCTCTCCCCG	CGCGTTGGCC	GATTCATTAA
6051	TGCAGCTGGC	ACGACAGGTT	TCCCGACTGG	AAAGCGGGCA	GTGAGCGCAA
6101	CGCAATTAAT	GTGAGTTAGC	TCACTCATTA	GGCACCCCAG	GCTTTACACT
6151	TTATGCTTCC	GGCTCGTATG	TTGTGTGGAA	TTGTGAGCGG	ATAACAATTT
6201	CACACAGGAA	ACAGCTATGA	CCATGATTAC	GAATTCGAGC	TCGGTACCCG
6251	GCGATCCTCT	AGAGTCGACC	TGCAGGCATG	CAAGCTTGGC	ACTGGCCGTC
6301	GTTTTACAAC	GTCGTGACTG	GGAAAACCCT	GGCGTTACCC	AACTTAATCG
6351	CCTTGCAGCA	CAATCCCCTT	TCGCCAGCTG	GCGTAATAGC	GAAGAGGCCC
6401	GCACCGATCG	CCCTTCCCAA	CAGTTGCGCA	GCCTGAATGG	CGAATGGCGC
6451	TTTGCCTGGT	TTCCGGCACC	AGAAGCGGTG	CCGGAAAGCT	GGCTGGAGTG
6501	CGATCTTCCT	GAGGCCGATA	CGGTCGTCGT	CCCCTCAAAC	TGGCAGATGC

Figure 5

M13mp18 Nucleic Acid Sequence

~~10/23~~ 10/29

6551	ACGGTTACGA	TGCGCCCATC	TACACCAACG	TAACCTATCC	CATTACGGTC
6601	AATCCGCCGT	TTGTTCCCAC	GGAGAATCCG	ACGGGTTGTT	ACTCGCTCAC
6651	ATTTAATGTT	GATGAAAGCT	GGCTACAGGA	AGGCCAGACG	CGAATTATTT
6701	TTGATGGCGT	TCCTATTGGT	TAAAAAATGA	GCTGATTTAA	CAAAAATTTA
6751	ACGCGAATTT	TAACAAAATA	TTAACGTTTA	CAATTTAAAT	ATTTGCTTAT
6801	ACAATCTTCC	TGTTTTTGGG	GCTTTTCTGA	TTATCAACCG	GGGTACATAT
6851	GATTGACATG	CTAGTTTTAC	GATTACCGTT	CATCGATTCT	CTTGTTTGCT
6901	CCAGACTCTC	AGGCAATGAC	CTGATAGCCT	TTGTAGATCT	CTCAAAAATA
6951	GCTACCCTCT	CCGGCATGAA	TTTATCAGCT	AGAACGGTTG	AATATCATAT
7001	TGATGGTGAT	TTGACTGTCT	CCGGCCTTTC	TCACCCTTTT	GAATCTTTAC
7051	CTACACATTA	CTCAGGCATT	GCATTTAAAA	TATATGAGGG	TTCTAAAAAT
7101	TTTTATCCTT	GCGTTGAAAT	AAAGGCTTCT	CCCGCAAAAG	TATTACAGGG
7151	TCATAATGTT	TTTGGTACAA	CCGATTTAGC	TTTATGCTCT	GAGGCTTTAT

Figure 5

M13mp18 Nucleic Acid Sequence

~~11/23~~ 11/29

COMPLEMENTARY TO M_{13}

POSITION	5' 3'	POSITION	
645	AGCAACACTATCATA	631	$M_{13}/1$
615	ACGACGATAAAAACC	601	$M_{13}/2$
585	TTTTGCAAAAGAAGT	571	$M_{13}/3$
555	AATAGTAAAATGTTT	541	$M_{13}/4$
525	CAATACTGCGGAATG	511	$M_{13}/5$
495	TGAATCCCCCTCAAA	481	$M_{13}/6$
465	AGAAAACGAGAATGA	451	$M_{13}/7$
435	CAGGTCTTTACCCTG	421	$M_{13}/8$
405	AGGAAAGCGGATTGC	391	$M_{13}/9$
375	AGGAAGCCCGAAAGA	361	$M_{13}/10$

COMPLEMENTARY TO SS PHAGE DNA

POSITION	5' 3'	POSITION	
351	ATATTTGAAGTCTTT	366	$M_{13}/11$
371	TCTTTTTGATGCAAT	386	$M_{13}/12$
391	CTATAATACTCAGGG	406	$M_{13}/13$
411	TGATTTATGGTCATT	426	$M_{13}/14$
431	GTTTAAAGCATTTGA	446	$M_{13}/15$
451	TATTTATGACGATTC	466	$M_{13}/16$
471	TATCCAGTCTAAACA	486	$M_{13}/17$
491	CTCTGGCAAAACTTC	506	$M_{13}/18$
511	TCGCTATTTTGGTTT	526	$M_{13}/19$
531	AAACGAGGGTTATGA	546	$M_{13}/20$

Figure 6

Primers for Nucleic Acid Production Derived from M13mp18 Sequence

~~12/23~~ 12/29

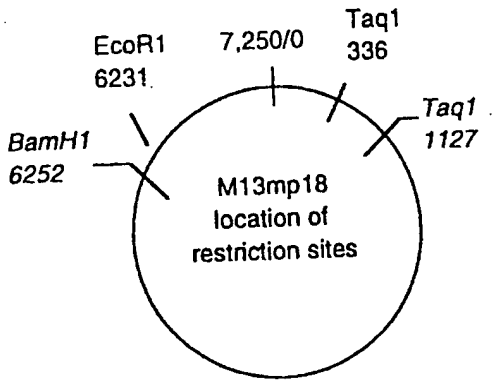
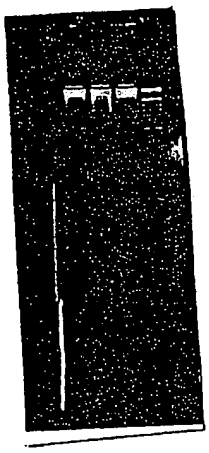


Figure 7

Appropriate M13mp18 Restriction Sites

~~13/23~~ 13/29



Lane 1: from calf thymus + Taq digested mp18 amplification reaction
Lane 2: from Taq digested mp18 amplification reaction
Lane 3: from calf thymus amplification reaction
Lane 4: øX174 Hinf1 size marker

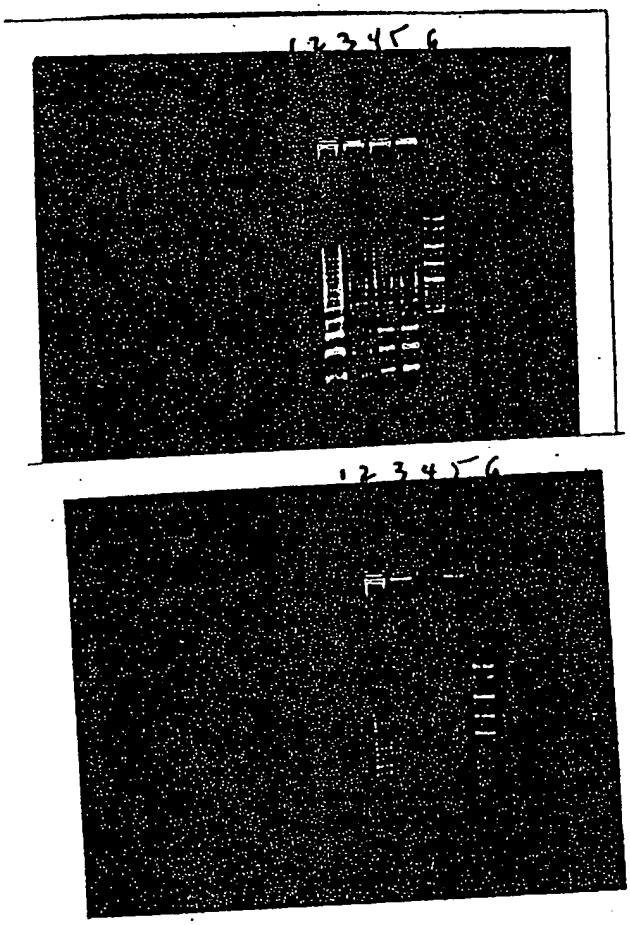
Figure 8

~~14/23~~ 14/29

Lane 1: no template
Lane 2: mp18 template, phosphate buffer
Lane 3: MspI/pBR322 size marker
Lane 4: mp18 template, MOPS buffer

Figure 9

~~15/23~~ 15/29

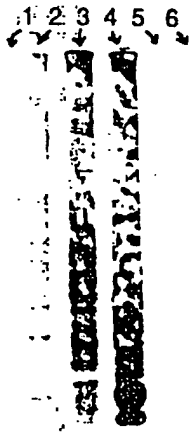


Top= (+) Template
Bottom= (-) Template

Lane 1: phosphate buffer
Lane 2: MES
Lane 3: MOPS
Lane 4: DMAB
Lane 5: DMG
Lane 6: pBR322/MspI size marker

Figure 10

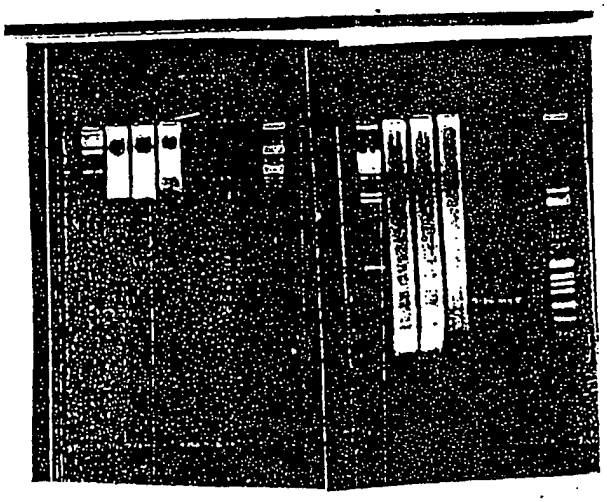
~~16/23~~ 16/29



Lane 1: DMAB buffer, no template
Lane 2: DMAB buffer, mp18 template
Lane 3: DMG buffer, no template
Lane 4: DMG buffer, mp18 template
Lane 5: No reaction
Lane 6: 200 ng Taq I digested mp18 size marker/positive control

Figure 11

~~17/23~~ 17/29



First Time Interval Second Time Interval

Agarose Gel Analysis

Lane 1: lambda Hind III marker
Lane 2: Amp/Untreated
Lane 3: Amp/Kinased
Lane 4: Amp/Kinased/Ligated
Lane 5: PCR/Untreated
Lane 6: PCR/Kinased
Lane 7: PCR/Kinased/Ligated
Lane 8: øX174/Hinf1 marker

Figure 12

~~18/23~~ 18/29

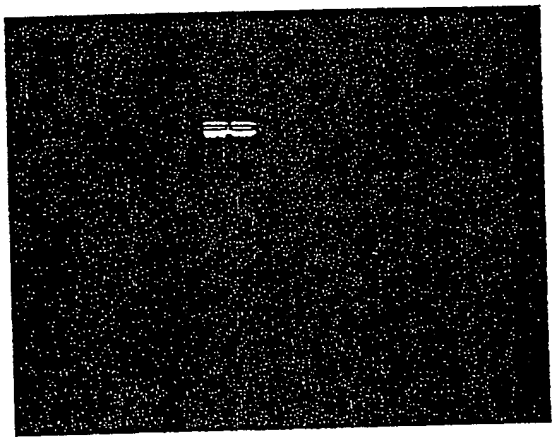
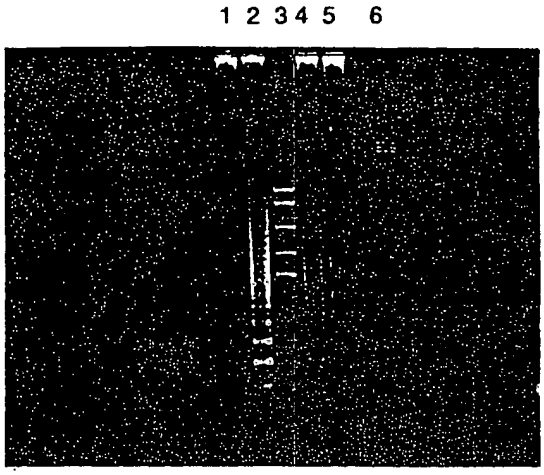


Figure 13

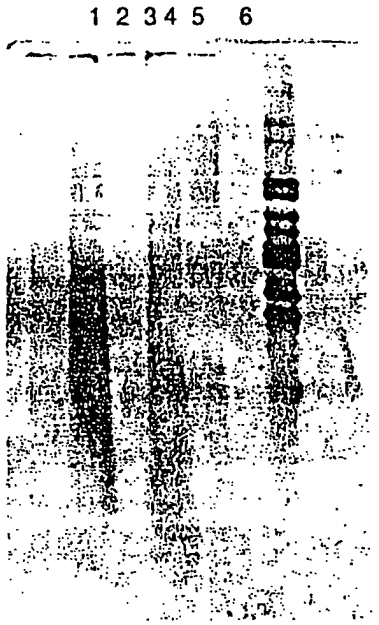
~~19/23~~ 19/29



Lane 1: Primers alone
Lane 2: Primers + taq digested M13 DNA
Lane 3: Molecular weight markers
Lane 4: Primers + RNA
Lane 5: Primers alone
Lane 6: M13 digested DNA
Buffer was dimethyl amino glycine, pH 8.6

Figure 14

~~20/23~~ 20/29



Lane 1: Primers alone
Lane 2: Primers + taq digested M13 DNA
Lane 3: Molecular weight markers
Lane 4: Primers + RNA
Lane 5: Primers alone
Lane 6: M13 digested DNA
Buffer was dimethyl amino glycine, pH 8.6

Figure 15

~~21/23~~ 21/29

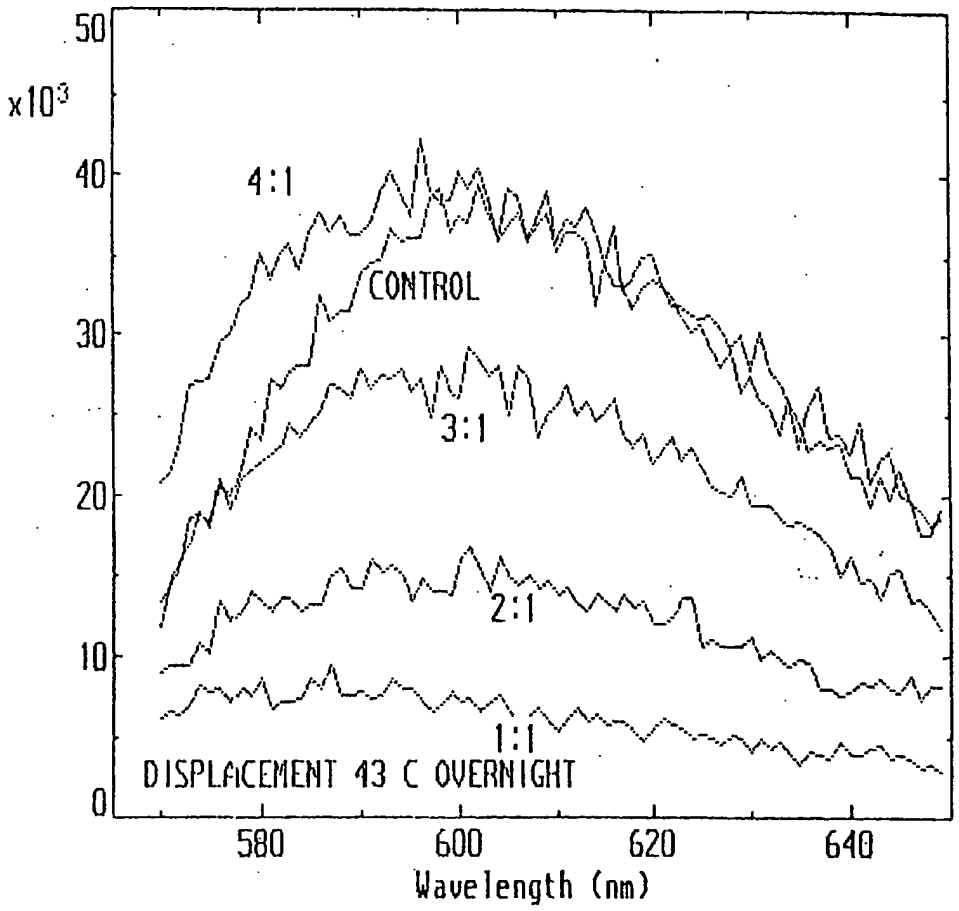


Figure 16

~~22/23~~ 22/29

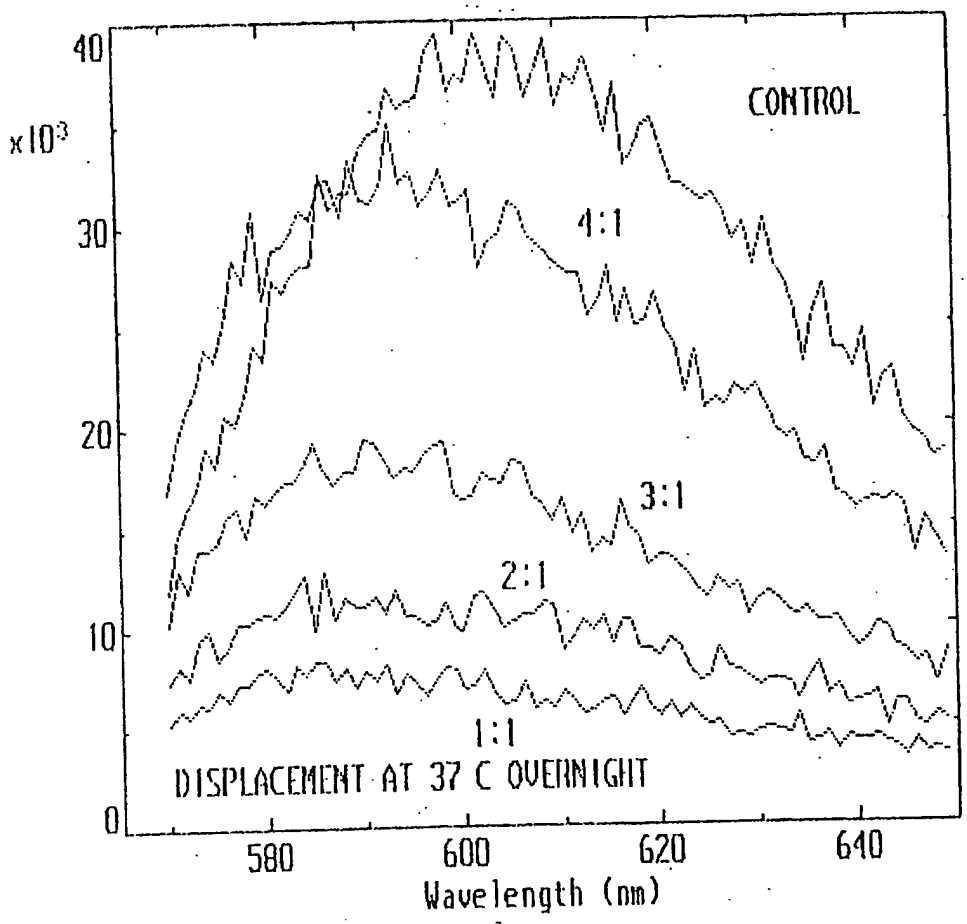


Figure 17

~~23/23~~ 23/29

pIBI 31-BH5-2

fmet AUG of Lac z {T7 Promotor region····
LAC PROMOTOR..ATG ACC ATG ATT ACG CCA GAT ATC AAA TTA ATA CGA CTC ACT ATA

oligo 50-mer 3'- tac t*aa t*gc ggt* ct*a t*ag t*Vt aat* tat* gct* gag t*ga t*at* c-5'
10 base insert

T7 RNA Start {«« T3 Promotor Region }
IGGG CTC ICCT TTA GTG ACG GTT AAT
···»») «- T3 Start Signal

pIBI 31 BSII/HCV

fmet AUG of Lac z {T3 Promotor region -»} T3 RNA Start
LAC PROMOTOR ..ATG ACC ATG ATT ACG CCA AGC TCG AAA TTA ACC CTC ACT AAA /GGG
oligo 50-mer 3'- tac t*aa t*ac t*aa t*gc ggt* t*V--10 base insert--.....

{«- T7 Promotor Region }
MULTIPLE CLONING SITE + 390 BASE INSERT CTA /TAG TGA GTC CGT ATT AAT....
«- T7 Start Signal
5'-ct*a t*ag t*ga gt*c gt*a tt*a at*.....

Figure 18

24/29

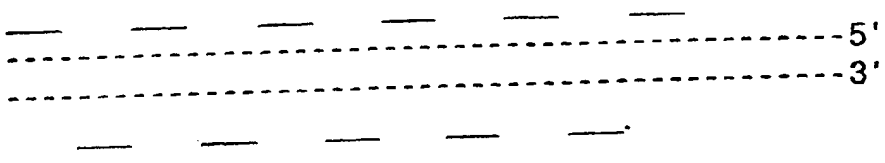
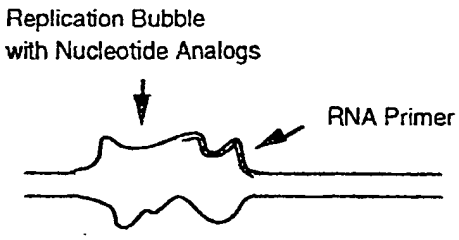
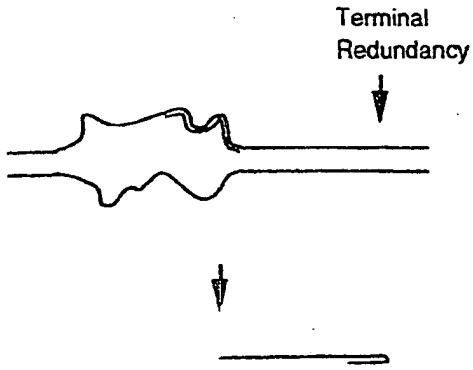


Figure 19



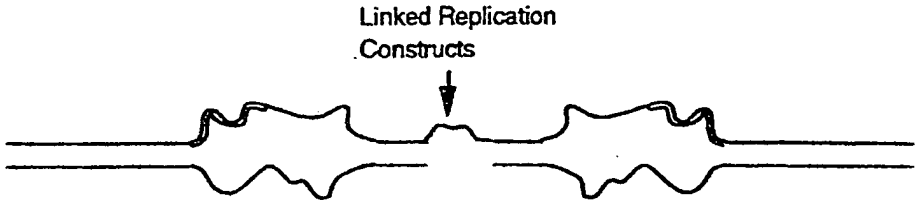
Primer-Dependent DNA Production Using Nucleic Acid Construct

Figure 20



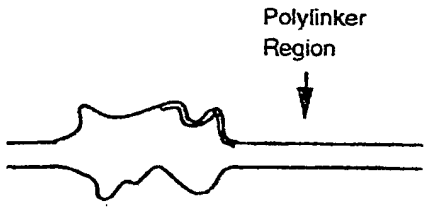
Hairpin Product

Figure 21



Linked Complementary Production Constructs

Figure 22



Cloning Site in Production Constructs

Figure 23

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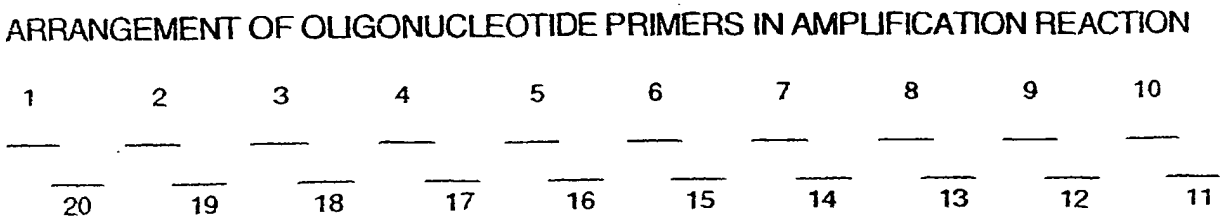

Figure 24